

Module Details	
Module Title	Derivatives Pricing and Valuation
Module Code	AFE7507-B
Academic Year	2024/5
Credits	20
School	School of Management
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	24
Seminars	24
Directed Study	152

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims
<p>The aims of Derivative Pricing and Valuation are to develop a critical understanding of the fundamental position of derivatives in corporate finance as well as their price and role in risk management. The module considers the nature of fixed-income securities and risky assets in pricing their derivatives and the impact of derivative pricing on company valuation.</p>

Outline Syllabus
<p>Fixed Income: Securities and markets, term structure and volatility of interest rates, bond management Derivatives: Forwards, futures and swaps, arbitrage pricing, payoff, role in risk management Derivatives: options, characteristics, strategies, payoff and profit Derivatives: plain vanilla option pricing models, binomial, Black-Scholes, greeks Derivatives: Exotic option pricing Derivatives: Interest rate and fixed income derivatives, pricing models Derivatives: Corporate valuation</p>

Learning Outcomes	
Outcome Number	Description
01	Critically evaluate the pricing method and role of derivatives in corporate finance.
02	Illustrate effectively derivative pricing methods through estimation and computation.
03	Identify and evaluate the factors affecting the pricing of derivatives on fixed-income securities and risky assets, as well as on the underlying instruments themselves.
04	Critically analyse the key characteristics of derivative instruments, the pricing determinants and their role in risk management.
05	Construct effective risk management strategies for moderating the risk associated with price and interest rate uncertainty.
06	Make rational judgments on the use of derivatives in managing exposure and corporate valuation.
07	Manage complex issues systematically, access and analyse data and information, and evaluate its relevance and validity.
08	Work effectively in teams to resolve problems and achieve objectives.

Learning, Teaching and Assessment Strategy
<p>There will be a staff-led two-hour lecture each week accompanied with a student-led seminar. Lectures will cover core institutional detail, theory and empirical evidence to motivate students own research and reading. In the seminars students will be asked to relay the results of this research, as a group and/or individually, or to discuss the solutions to pre-prepared exercises. More practical skill based learning is motivated by the use of the Bloomberg Laboratory, the use of Excel and other packages such as R for obtaining a better feel for the way in which analysis is conducted in the financial industry. Directed study comprises the personal reading, preparation for lectures, seminars, assessment and discussions with peers. Learning will also be supported by the use of Canvas and students will be required to participate in discussions via Canvas discussion board.</p> <p>Formative assessment and oral feedback will be provided during seminar sessions and written feedback will be provided via assessment of group coursework and selected tutorial work. The module is assessed by a group assignment and a final exam. The group assignment will enable students to collaborate in working through a more complex application of the material, through the detailed analysis of real-world bond market data and associated risk variables. Students may also be required to present their coursework in the classroom. An individual assignment will replace the group assignment at the supplementary level. The assignments and the exam are designed to test all the learning outcomes listed below (1-8).</p>

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Examination - Closed Book	Closed book exam (1.5 hours)	50%
Summative	Coursework - Written	Group coursework(1500 words); Supplementary assessment: Individual coursework (1000 words)	50%

Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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